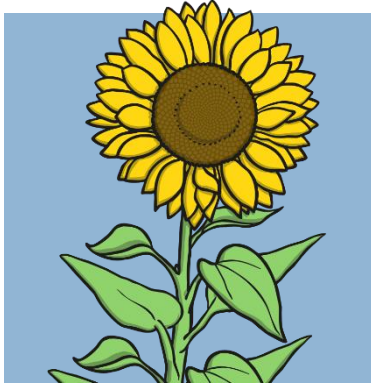




# What Do Plants Need To Grow Well?

# What Do Plants Need?



Plants are living things.

There are **7 life processes** that tell us if something is alive.

The 7 life process are movement, respiration, growth, reproduction, excretion, nutrition and sensitivity. Plants do all 7 of these things.

Plants need certain conditions to help them grow well.

Have you ever looked after a plant?  
What did you have to provide it with to help it to grow?

What do you think plants need?

# How Can We Find Out?

This week we are going to find out exactly what plants need to grow well.

Scientists find things out by setting up investigations and gathering results.

There are different types of investigation: fair tests, comparative tests, exploring and observing, finding patterns or sorting and classifying.

Scientists choose which type of investigation is best for what they are trying to find out.

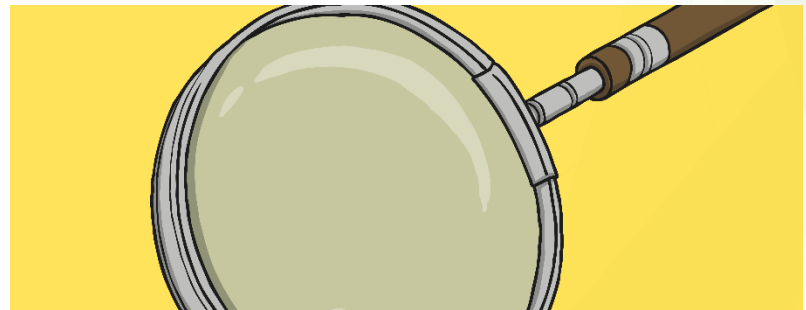
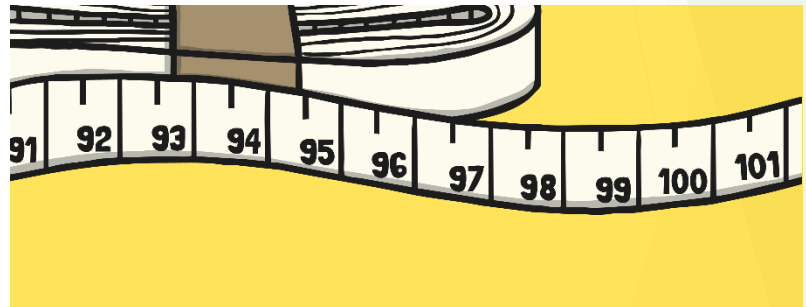


# How Can We Find Out?

We are going to do an **exploring and observing investigation**, so we can see what happens to plants grown in different conditions.

Mrs Robinson has set up the investigation and will share her results with you next week!

This week, you will use **'Investigating Plant Growth – Activity 1'** to record your ideas.



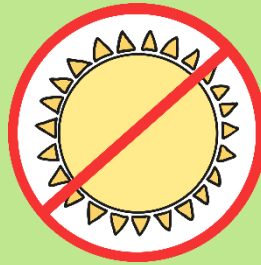
# What Are We Going to Investigate?

Scientists start with a question that they want to investigate.

Below are the 3 questions we want to find the answers to:



What happens if a  
plant has **no**  
**water?**



Can a plant  
grow in  
the **dark?**



If a plant has **no**  
**warmth**, will it still  
grow?

# The Investigation:

Mrs Robinson planted 4 runner bean seeds in pots of soil.

One bean was labelled as the '**Control Bean**' and was given everything it needed to grow. It was watered regularly and put in a warm, sunny spot.

This bean would be used as a comparison, to see how the beans should have grown had they been given everything they needed.



# The Investigation:

The second bean was labelled '**No Sunlight**'.

It was still watered and put in a warm cupboard, **BUT** it received no sunlight.



# The Investigation:

The third bean was labelled '**No Warmth**'.

It was still watered and had sunlight, BUT it was placed in a cold place and therefore had no warmth.

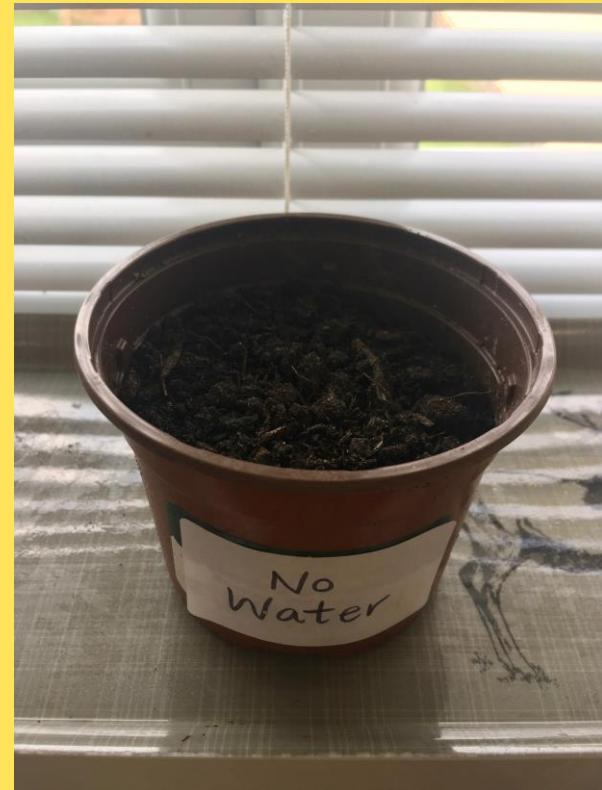




# The Investigation:

The final bean was labelled '**No Water**'.

It was placed in a warm, sunny spot, BUT it was never watered.



# The Investigation:

Once the investigation was set up, Mrs Robinson needed to watch the plants carefully.

When scientists look carefully at things, it is called 'observing', or 'making an observation'.

Over a week, Mrs Robinson will observe the plants regularly to see what is happening.

This week it is your job to predict what you think will happen to each of the plants.



# What Do You Predict Will Happen?

Before setting an investigation up, scientists think about what they will find out. This is called 'making a prediction'.

When you make a prediction, you say what you think will happen in your investigation.



**Using 'Investigating Plant Growth – Activity 1':** Can you predict what you think will happen to each of the plants, explaining why?